

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-34 (Canceled).

Claim 35 (Currently Amended): A threaded tubular connection for a tubular string that is subjected to dynamic bending loads, comprising:

a male tubular element including a male threaded portion and a female tubular element including a female threaded portion,

at least one transfer zone axially disposed between the threaded portions and a free end of one of the tubular elements, while being axially spaced from the threaded portions ~~so as to transfer~~, wherein a fraction of at least 20% of bending moment, to which the connection is subjected, is transferred from one element to the other,

the male and female elements including respective transfer surfaces in mutual contact with a radial interference fit in the transfer zone, at least one of the transfer surfaces being an undulated surface having a profile and defining a series of annular rounded ribs that come into interfering contact with the facing transfer surface, points of maximum diameter and minimum diameter of the ~~undulation~~ profile being located on respective rounded portions of the profile, the free end of one of the tubular elements having a front surface free of contact with the other tubular element.

Claim 36 (Cancelled).

Claim 37 (Currently Amended): A threaded connection according to ~~claim~~ claims 35 or 58, ~~in which~~ wherein the transfer zone is made of a material having a yield strength and an

axial length of such that the transfer zone limits contact pressure resulting from transferring the bending moment to a fraction of the yield strength of the material ~~which is less than 1~~.

Claim 38 (Currently Amended): A threaded connection according to ~~claim~~ claims 35 or 58, in which the male and female transfer surfaces are lubricated.

Claim 39 (Currently Amended): A threaded connection according to ~~claim~~ claims 35 or 58, in which the facing transfer surface is a smooth surface, the undulated surface being out of contact with the smooth surface between the ribs.

Claim 40 (Previously Presented): A threaded connection according to claim 39, in which the undulated surface is out of contact with the smooth surface between the ribs.

Claim 41 (Currently Amended): A threaded tubular connection ~~according to claim 35~~, for a tubular string that is subjected to dynamic bending loads, comprising:

a male tubular element including a male threaded portion and a female tubular element including a female threaded portion,

at least one transfer zone axially disposed between the threaded portions and a free end of one of the tubular elements, while being axially spaced from the threaded portions, wherein a fraction of at least 20% of bending moment, to which the connection is subjected, is transferred from one element to the other,

the male and female elements including respective transfer surfaces in mutual contact with a radial interference fit in the transfer zone, at least one of the transfer surfaces being an undulated surface having a profile and defining a series of annular rounded ribs that come

into interfering contact with the facing transfer surface, points of maximum diameter and minimum diameter of the profile being located on respective rounded portions of the profile, wherein ~~in which~~ the two transfer surfaces are undulated surfaces.

Claim 42 (Previously Presented): A threaded connection according to claim 41, in which the ribs of a transfer surface are housed between the ribs of the facing transfer surface.

Claim 43 (Currently Amended): A threaded connection according to ~~claim~~ claims 35 or 58, in which the undulated surface has a periodic profile with undulations that periodically repeat over the undulated surface.

Claim 44 (Previously Presented): A threaded connection according to claim 43, in which the periodic profile is asymmetric.

Claim 45 (Currently Amended): A threaded tubular connection ~~according to claim 35, in which~~ for a tubular string that is subjected to dynamic bending loads, comprising:  
a male tubular element including a male threaded portion and a female tubular element including a female threaded portion,

at least one transfer zone axially disposed between the threaded portions and a free end of one of the tubular elements, while being axially spaced from the threaded portions,  
wherein a fraction of at least 20% of bending moment, to which the connection is subjected, is transferred from one element to the other,

the male and female elements including respective transfer surfaces in mutual contact with a radial interference fit in the transfer zone, at least one of the transfer surfaces being an undulated surface having a profile and defining a series of annular rounded ribs that come

into interfering contact with the facing transfer surface, points of maximum diameter and minimum diameter of the profile being located on respective rounded portions of the profile,  
the profile ~~forms~~ forming part of the male transfer surface and is being defined by a first convex rounded portion containing a point with a maximum profile diameter, by a second concave rounded portion containing a point with a minimum profile diameter and that is tangential to the first rounded portion, and by a third convex rounded portion tangential to the first and second rounded portions and that has a radius substantially larger thereof, starting from the free end of the male element, an axial distance between a maximum profile diameter point and the following minimum diameter point of the profile being less than an axial distance between a minimum profile diameter point and the following maximum diameter point of the profile.

Claim 46 (Previously Presented): A threaded connection according to claim 45, in which the second rounded portion has a larger radius than the first rounded portion.

Claim 47 (Cancelled).

Claim 48 (Currently Amended): A threaded connection according to claim ~~47~~ 45, in which the third rounded portion is located between a minimum profile diameter point and the following maximum diameter point of the profile.

Claim 49 (Currently Amended): A threaded connection according to ~~claim~~ claims 35 or 58, in which the radii of the rounded portions containing the points of maximum diameter and of minimum diameter of the profile are at least equal to 0.4 mm.

Claim 50 (Currently Amended): A threaded connection according to ~~claim~~ claims 35 or 58, in which the axial distance between two consecutive points of maximum diameter of the profile is at least equal to 1 mm and in which the axial distance between two consecutive points of minimum diameter of the profile is at least equal to 1 mm.

Claim 51 (Currently Amended): A threaded connection according to ~~claim~~ claims 35 or 58, in which the radial interference fit is substantially constant from one rib to the other.

Claim 52 (Currently Amended): A threaded connection according to ~~claim~~ claims 35 or 58, in which the radial interference fit is about 0.4 mm in diameter for a nominal threaded element diameter of 177.8 mm.

Claim 53 (Currently Amended): A threaded connection according to ~~claim~~ claims 35 or 58, in which the transfer surfaces are in mutual metal/metal sealing contact.

Claim 54 (Currently Amended): A threaded connection according to ~~claim~~ claims 35 or 58, in which a sealing material in a form of a coating or of an added ring is interposed between the metal surfaces of the male and female elements in the transfer zone.

Claim 55 (Currently Amended): A threaded connection according to ~~claim~~ claims 35 or 58, in which the male and female transfer surfaces or their envelopes form part of tapered surfaces.

Claim 56 (Currently Amended): A threaded connection according to ~~claim~~ claims 35 or 58, in which the transfer surfaces or their envelopes are inclined with respect to the axis of connection by an angle between  $0.5^{\circ}$  and  $5^{\circ}$ .

Claim 57 (Currently Amended): A threaded connection according to ~~claim~~ claims 35 or 58, in which the undulated surface has a roughness Ra at most equal to 3.2 micrometers.

Claim 58 (Currently Amended): A threaded tubular connection ~~according to claim 35, in which~~ for a tubular string that is subjected to dynamic bending loads, comprising:

a male tubular element including a male threaded portion and a female tubular element including a female threaded portion,

at least one transfer zone axially disposed between the threaded portions and a free end of one of the tubular elements, while being axially spaced from the threaded portions, wherein a fraction of at least 20% of bending moment, to which the connection is subjected, is transferred from one element to the other,

the male and female elements including respective transfer surfaces in mutual contact with a radial interference fit in the transfer zone, at least one of the transfer surfaces being an undulated surface having a profile and defining a series of annular rounded ribs that come into interfering contact with the facing transfer surface, points of maximum diameter and minimum diameter of the profile being located on respective rounded portions of the profile, the transfer zone being axially disposed between the threaded portions and the free end of the female element.

Claim 59 (Previously Presented): A threaded connection according to claim 58, in which the male transfer surface is adjacent to a regular portion of a great length tube at one end of which the male tubular element is formed.

Claim 60 (Previously Presented): A threaded connection according to claim 58, in which the facing transfer surface is a smooth surface, and the undulated surface and the smooth surface form part of the male and female elements respectively.

Claim 61 (Previously Presented): A threaded connection according to claim 58, in which the outer peripheral surface of the female element includes a depression that locally reduces its external diameter facing the transfer zone.

Claim 62 (Currently Amended): A threaded connection according to claim 61, in which the depression has an axially extending concave curvilinear profile facing the transfer zone and ~~either each side thereof of the transfer zone~~, the external diameter being minimal substantially facing a median point of the transfer zone and increasing progressively to ~~either~~ each side of the point.

Claim 63 (Previously Presented): A threaded connection according to claim 62, in which the curvilinear concave profile is connected to a chamfer adjacent to the free end of the female element.

Claim 64 (Currently Amended): A threaded connection according to claim 62, in which the minimum external diameter is such that the bending inertia of the female element in the plane along the external surface of the female member at the minimum external point

~~of the minimum diameter~~ is at least equal to the product of the bending inertia of the regular portion of a great length tube at one end of which the male tubular element is formed and the fraction of the bending moment to be transferred.

Claim 65 (Previously Presented): A threaded connection according to claim 62, in which the concave curvilinear profile has a radius of curvature of at least 50 mm.

Claim 66 (Currently Amended): A threaded connection according to claim ~~35~~ 58, in which the female element forms part of a short coupling each end of which is provided with a female threaded element that can receive a male threaded element forming part of a great length tube for connecting the two tubes.

Claims 67 and 68 (Cancelled).